

SUITABILITY GROUP A-1

(Loamy Bottomland)

Description: Deep, well drained or moderately well drained soils with loamy surfaces and loamy or clayey subsoils. Soils in this subgroup occur on floodplains and terraces which receive extra moisture from adjoining areas. (Soils with a clayey subsoil have at least 14 inches of loamy material above the subsoil.)

Limitations: Soils in this subgroup can have slight wetness and slight salinity or alkalinity.

Soils: Alluvial land
Angelus silt loam
Bridgeport loam, clay loam, fine sandy loam, silt loam
silty clay loam
Caruso loam, silt loam
Goshen silt loam
Grigston silt loam
Hord silt loam
Humbarger loam
Las loam, clay loam, sandy loam, complex
Las Animas clay loam
Roxbury silt loam, soils
Ryus silty clay loam
Volin silt loam, soils

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	4	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	5	8	6	7	2-3					FAIR-GOOD
INDIANGRASS	5	8	5	7	1-3	0	0	0	5.5-7.5	FAIR
CHEYENNE	5	8	6	7	1-3					FAIR
NEBRASKA 54	4N	7N	6	7	1-3					FAIR
SIDEDOTS GRAMA	6	8	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	6	8	4	5	1-3					GOOD
SWITCHGRASS	6	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	6	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
CREeping FOXTAIL	0	5N	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	0	5N	7	7	1-2					POOR
MEADOW BROMEGRASS	4	7	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REGAR	4	7	7	6	1-2					FAIR
ORCHARDGRASS	0	8	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	8	7	7	1-2					POOR
REED CANARYGRASS	0	6	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
IOREED	0	6	8	6	1-2					POOR
RISE	0	5	8	6	1-2					POOR
SMOOTH BROMEGRASS	4	8	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	4	8	7	7	1					FAIR
LINCOLN	3	7	7	7	1					FAIR
SOUTHLAND	4	8	7	7	1					FAIR
TALL FESCUE	0	7	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	7	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	4	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	4	7	6	4	1-2					FAIR
TALL	5	8	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	5	8	6	4	1-2					FAIR
WESTERN	5	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	5	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	5	9	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	4	8	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATINGS FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP A-2

(Loamy)

Description: Deep, well drained or moderately well drained soils with loamy surfaces and loamy or clayey subsoils. Soils in this subgroup occur on uplands and receive little or no extra moisture from adjoining areas. (Soils with a clayey subsoil have at least 14 inches of loamy material above the subsoil.)

Limitations: Few or no limitations. Soils in this subgroup can have slight wetness and slight salinity or alkalinity.

Soils: Keith loam, silt loam
Kuma silt loam
Lubbock loam, silt loam, silty clay loam
Richfield loam, silt loam, silty clay loam, complex, fine sandy loam
Satanta loam, fine sandy loam
Ulysses loam, silt loam, silty clay loam, complex

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
BIG BLUESTEM	4	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	4	8	6	7	2-3					FAIR-GOOD
INDIANGRASS	3	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	3	8	6	7	1-3					FAIR
NEBRASKA 54	3N	7N	6	7	1-3					FAIR
SIDEDATS GRAMA	6	7	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	6	7	4	5	1-3					GOOD
SWITCHGRASS	5	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	5	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
MEADOW BROMEGRASS	3	6	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REGAR	3	6	7	6	1-2					FAIR
ORCHARDGRASS	0	6	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	6	7	7	1-2					POOR
REED CANARYGRASS	0	5	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
TOREED	0	5	8	6	1-2					POOR
RISE	0	5	8	6	1-2					POOR
SMOOTH BROMEGRASS	2	7	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	2	7	7	7	1					FAIR
LINCOLN	0	6	7	7	1					FAIR
SOUTHLAND	0	7	7	7						FAIR
TALL FESCUE	0	7	6	4		1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	7	7	4						POOR
WHEATGRASS										
INTERMEDIATE	3	6	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	3	6	6	4	1-2					FAIR
TALL	4	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	4	7	6	4	1-2					FAIR
WESTERN	5	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	5	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	0	8	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	0	7	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP A-3
(Coarse Loamy Bottomlands)

Description: Deep, well drained or moderately well drained soils with loamy surfaces and subsoils. Soils in this subgroup have moderately coarse-textured surfaces, occur on lowlands, and may receive extra moisture from adjoining areas.

Limitations: Lack of moisture and soil blowing may be hazards during establishment of pasture.

Soils: Glenberg sandy loam
Las Animas sandy loam, loamy sand, soils, complex
Munjor complex

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	5	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	5	8	6	7	2-3					FAIR-GOOD
INDIANGRASS	5	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	5	8	6	7	1-3					FAIR
NEBRASKA 54	4N	7N	6	7	1-3					FAIR
SAND BLUESTEM	5	8	5	7	1-3	0	0-1	0	5.5-7.5	FAIR-GOOD
GARDEN	5N	8N	5	7	1-3					FAIR-GOOD
WOODWARD	5	8	6	7	1-3					FAIR-GOOD
SIDEGRASS GRAMA	6	8	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	6	8	4	5	1-3					GOOD
SWITCHGRASS	6	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	6	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
CREEPING FOXTAIL	0	5N	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
BARRISON	0	5N	7	7	1-2					POOR
MEADOW BROMEGRASS	4	7	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REGAR	4	7	7	6	1-2					FAIR
ORCHARDGRASS	0	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	7	7	7	1-2					POOR
REED CANARYGRASS	0	6	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LOREED	0	6	8	6	1-2					POOR
RISE	0	5	8	6	1-2					POOR
SMOOTH BROMEGRASS	4	8	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	4	8	7	7	1					FAIR
LINCOLN	3	7	7	7	1					FAIR
SOUTHLAND	4	7	7	7	1					FAIR
TALL FESCUE	0	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	8	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	4	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	4	7	6	4	1-2					FAIR
TALL	5	8	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	5	8	6	4	1-2					FAIR
WESTERN	5	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	5	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	5	9	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	4	8	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP A-4

(Sands)

Description: Deep, well drained to excessively drained soils with sandy surfaces and subsoils. Available water holding capacity in the 40-inch root zone is less than four inches.

Limitations: Choice of plants is limited by droughtiness and low fertility. Lack of moisture and soil blowing may be a hazard during establishment of recommended species.

Soils: Dix soils
Dwyer loamy fine sand
Schamber gravelly sandy loam
Tivoli loamy fine sand 1/
Vona loamy fine sand

1/ Suitable only when irrigated.

Recommended Species: See chart on next page

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			Ph RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	4	7	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	4	7	6	7	2-3					FAIR-GOOD
INDIANGRASS	4	7	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	4	7	6	7	1-3					FAIR
NEBRASKA 54	3N	6N	6	7	1-3					FAIR
PRAIRIE SANDREED	5	8	5	3	2-3	0-1	0-1	0-1	5.5-7.0	GOOD
GOSHEN	5	8	6	3	2-3					GOOD
SAND BLUESTEM	5	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
GARDEN	5N	8N	5	7	1-3					FAIR-GOOD
WOODWARD	5	8	6	7	1-3					FAIR-GOOD
SIDEHATS GRAMA	5	7	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	5	7	4	5	1-3					GOOD
SWITCHGRASS	5	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	5	7	6	5	1-2					GOOD
COOL SEASON GRASSES										
CREeping FOXTAIL	0	5	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	0	5	7	7	1-2					POOR
MEADOW BROMEGRASS	0	7	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REGAR	0	7	7	6	1-2					FAIR
ORCHARDGRASS	0	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	7	7	7	1-2					POOR
SMOOTH BROMEGRASS	0	7	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	0	7	7	7	1					FAIR
LINCOLN	0	6	7	7	1					FAIR
SOUTHLAND	0	7	7	7	1					FAIR
TALL FESCUE	0	7	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	7	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	0	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	0	7	6	4	1-2					FAIR
LEGUMES										
ALFALFA (STANDARD)	0	8	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	0	7	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / Ph RANGE - LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP A-6

(Coarse Loamy Upland)

Description: Deep, well drained soils with loamy surfaces and subsoils. Soils in this subgroup have moderately coarse-textured surfaces and occur on uplands.

Limitations: Lack of moisture and soil blowing may be hazards during establishment of recommended species.

Soils: Bayard fine sandy loam
Dalhart fine sandy loam, loamy fine sand
Manter fine sandy loam, complex
Otero fine sandy loam, complex

Recommended Species: See chart on next page

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			Ph RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	4	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAW	4	8	6	7	2-3					FAIR-GOOD
INDIANGRASS	3	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	3	8	6	7	1-3					FAIR
SAND BLUESTEM	4	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
WOODWARD	4	8	6	7	1-3					FAIR-GOOD
SIDEGRASS GRAMA	6	7	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	6	7	4	5	1-3					GOOD
SWITCHGRASS	5	8	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	5	8	6	5	1-2					GOOD
COOL SEASON GRASSES										
MEADOW BROMEGRASS	3	7	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REGAR	3	7	7	6	1-2					FAIR
ORCHARDGRASS	0	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	7	7	7	1-2					POOR
REED CANARYGRASS	0	5	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LOREED	0	5	8	6	1-2					POOR
RISE	0	5	8	6	1-2					POOR
SMOOTH BROMEGRASS	2	8	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	2	8	7	7	1					FAIR
LINCOLN	0	6	7	7	1					FAIR
SOUTHLAND	2	8	7	7	1					FAIR
TALL FESCUE	0	8	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	8	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	3	6	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	3	6	6	4	1-2					FAIR
TALL	4	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	4	7	6	4	1-2					FAIR
WESTERN	5	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	5	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	0	8	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	0	7	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / Ph RANGE - LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP A-7

(Deep Limy)

- Description: Deep, well drained or somewhat excessively drained soils with loamy surfaces and subsoils that contain lime throughout the profile.
- Limitations: Soils in this subgroup are slightly affected by limy surfaces and subsoils.
- Soils: Campus loam, complex
Colby loam, silt loam - 15 percent slopes
Elkader silt loam
Kim clay loam, complex
Mansic clay loam, complex
Mansker loam, clay loam, complex
Minnequa silt loam, complex
Penden clay loam

Recommended Species: See chart on next page

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	4	8	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	4	8	6	7	2-3					FAIR-GOOD
INDIANGRASS	3	8	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	3	8	6	7	1-3					FAIR
NEBRASKA 54	3N	7N	6	7	1-3					FAIR
SIDEWAYS GRAMA	6	7	3	5	1-3	0-1	0	0	6.0-7.5	GOOD
EL RENO	6	7	4	5	1-3					GOOD
SWITCHGRASS	4	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	4	7	6	5	1-2					GOOD
COOL SEASON GRASSES										
MEADOW BROMEGRASS	2	5	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REGAR	2	5	7	6	1-2					FAIR
ORCHARDGRASS	0	5	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	5	7	7	1-2					POOR
SMOOTH BROMEGRASS	0	6	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	0	6	7	7	1					FAIR
LINCOLN	0	5	7	7	1					FAIR
SOUTHLAND	0	6	7	7	1					FAIR
TALL FESCUE	0	5	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	5	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	2	5	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	2	5	6	4	1-2					FAIR
TALL	4	7	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	4	7	6	4	1-2					FAIR
WESTERN	5	8	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	5	8	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	0	7	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	0	6	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD

1_/ ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2_/ SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3_/ GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4_/ STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5_/ FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6_/ PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP A-9

(Sandy Bottomland)

Description: Deep, well drained or excessively drained soils with sandy surfaces and subsoils. Soils in this subgroup have sandy surfaces and occur on bottomlands and receive extra water from upland drainage.

Limitations: Choice of plants is limited by droughtiness and low fertility. Soil blowing may be extremely hazardous during establishment and early growth.

Soils: Bankard loamy sand, sandy loam
Inavale soils
Lincoln sand, fine sandy loam, soils

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
INDIANGRASS	4	7	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	4	7	6	7	1-3					FAIR
PRAIRIE SANDREED	5	8	5	3	2-3	0-1	0-1	0-1	5.5-7.0	GOOD
GOSHEN	5	8	6	3	2-3					GOOD
SAND BLUESTEM	5	8	5	7	1-3	0-1	0-1	0-1	5.5-7.5	FAIR-GOOD
WOODWARD	5	8	6	7	1-3					FAIR-GOOD
SWITCHGRASS	5	7	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	5	7	6	5	1-2					GOOD
COOL SEASON GRASSES										
CREEPING FOXTAIL	0	5	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	0	5	7	7	1-2					POOR
MEADOW BROMEGRASS	0	7	6	6	1-2	1-2	1-2	0-2	5.5-7.0	FAIR
REBAR	0	7	7	6	1-2					FAIR
ORCHARDGRASS	0	7	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	0	7	7	7	1-2					POOR
SMOOTH BROMEGRASS	0	7	6	7	1	1-2	1-2	0-2	5.5-7.0	FAIR
ACHENBACH	0	7	7	7	1					FAIR
LINCOLN	0	6	7	7	1					FAIR
SOUTHLAND	0	7	7	7	1					FAIR
TALL FESCUE	0	7	6	4	1	1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	0	7	7	4	1					POOR
WHEATGRASS										
INTERMEDIATE	0	7	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	0	7	6	4	1-2					FAIR
WESTERN	4	7	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	4	7	5	5	1-3					GOOD
LEGUMES										
ALFALFA (STANDARD)	0	8	10	8	1	0-1	1-3	1-3	6.5-8.0	GOOD
(RHIZOMATOUS)	0	7	7	8	1-2	0-1	1-3	1-2	6.5-8.0	GOOD

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP C-1

(Wet Loamy)

Description: Deep, somewhat poorly or poorly drained soils with loamy surfaces and loamy to clayey subsoils. Soils in this subgroup occur on floodplains and terraces which receive extra moisture from adjoining areas.

Limitations: Seasonal wetness during a portion of the growing season.

Soils: Sweetwater clay loam, soils

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
BIG BLUESTEM	4	-	5	7	2-3	0-1	0	0	6.0-7.5	FAIR-GOOD
KAN	4	-	6	7	2-3					FAIR-GOOD
INDIANGRASS	4	-	5	7	1-3	0-1	0	0	5.5-7.5	FAIR
CHEYENNE	4	-	6	7	1-3					FAIR
SWITCHGRASS	6	-	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	6	-	6	5	1-2					GOOD
COOL SEASON GRASSES										
CREEPING FOXTAIL	5	-	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
GARRISON	5	-	7	7	1-2					POOR
ORCHARDGRASS	4	-	6	7	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LATAR	4	-	7	7	1-2					POOR
REED CANARYGRASS	5	-	7	6	1-2	1-2	1-2	0-2	5.5-7.0	POOR
LOREED	5	-	8	6	1-2					POOR
RISE	5	-	8	6	1-2					POOR
TALL FESCUE	3	-	6	4		1-2	1-2	0-2	6.2-7.0	POOR
KENTUCKY 31	3	-	7	4						POOR
WHEATGRASS										
INTERMEDIATE	5	-	5	4	1-2	1-2	1-2	0-1	6.0-7.5	FAIR
SLATE	5	-	6	4	1-2					FAIR
TALL	7	-	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	7	-	6	4	1-2					FAIR
WESTERN	7	-	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	7	-	5	5	1-3					GOOD

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

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3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP G-3

(Wet Sodic)

- Description: Deep, somewhat poorly or poorly drained loamy soils with a high sodium absorption ratio. The subsoils range from sandy to clayey and contain a high water table during the winter and/or spring months.
- Limitations: Choice of plants is limited by high sodium content and moderate salinity. Wetness during a portion of the growing season is common.
- Soils: Arvada silty clay loam
Bowdoin clay, clay loam, loamy fine sand
Church clay, silty clay loam
Drummond silt loam, complex
Las Animas - Lesho complex, alkali
Richfield silt loam, saline
Ulysses silt loam, saline

Recommended Species: See chart on next page.

SPECIES	SPECIES ADAPTABILITY 1 /		SPECIES PRODUCTIVITY 2 /	GRAZING PREFERENCE 3 /	STAND ESTABLISHMENT 4 /	FERTILIZER NEEDS 5 /			PH RANGE 6 /	DROUGHT TOLERANCE
	DRYLAND	IRRIGATED				N	P	K		
WARM SEASON GRASSES										
ALKALI SACATON	5	0	4	2	2-3	0-1	0	0	6.5-8.0	GOOD
SALTALK	5	0	5	2	2-3					GOOD
SWITCHGRASS	5	0	5	5	1-2	0-2	0	0	5.5-8.0	GOOD
BLACKWELL	5	0	6	5	1-2					GOOD
COOL SEASON GRASSES										
WHEATGRASS										
TALL	5	0	5	4	1-2	1-2	1-2	0-1	7.0-8.5	FAIR
JOSE	5	0	6	4	1-2					FAIR
WESTERN	4	0	4	5	1-3	0-1	0-1	0-1	6.5-8.5	GOOD
BARTON	4	0	5	5	1-3					GOOD

1 / ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

2 / SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

3 / GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

4 / STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

5 / FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

6 / PH RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SUITABILITY GROUP H

(Not Suitable)

Description: This group includes various textures and phases of soils and land types which occur on a wide range of slopes and topography.

Limitations: Soils in this group are generally too shallow, erosive, gravelly, stony, or rocky; too steep, droughty, wet, clayey, or saline and alkaline for good survival or growth of pasture species.

Soils: Active dunes
Arkansas River
Badlands
Blowout land
Broken land
Canlon loam, complex
Canyon loam
Colby loam, silt loam - 15 percent slopes
Gravelly broken land
Limon silty clay
Lismas clay
Lofton clay loam, silty clay loam
Midway clay
Ness clay
Pleasant silty clay loam
Potter soils
Promise clay
Randall clay
Razor clay
Travessilla soils

Recommended Species: See Standards and Specifications for Critical Area Planting (342).